

The following day I put the bird off the nest but was unable to get a glimpse or a clue as to its identity.

On June 21st the bird was sitting closely and I was able to get a view of her from only twelve inches away. She was rufous with olive on the head and back and the flanks were conspicuously barred with black and white. When she left the nest she demonstrated at me by making an extraordinary noise like a hiss of a snake only deeper and more guttural. This was repeated about six times as the bird was making away in the undergrowth. The bird was still sitting on June 24th, but during the night the nest was destroyed possibly by rats as all I found was one egg on the ground with a large hole in the side and bits and pieces strewn over the ground.

I sent the egg to the Bird Section of the South Kensington Museum for identification, and it was confirmed as being that of the Indian Banded Crake, formerly *Rallus superciliaris superciliaris* Gray.

I can find no records of the occurrence of this bird in the Darjeeling District. This nest was found at 3,300 ft. elevation.

TUMSONG TEA ESTATE,
MARYBONG, P.O.,
via DARJEELING, D.H. RY.,
April 12, 1953.

W. H. MATTHEWS, M.B.O.U.

[B. B. Osmaston has in two successive years found it breeding at Dehra Dun (*J.B.N.H.S.*, Vol. 24, p. 824 and Vol. 26, p. 429). He records that the bird sat very closely on the eggs and pecked at his hand when he put it out. 'All the time she was delivering her attacks she gave vent to a peculiar noise somewhat resembling the swearing of a cat.'—EDS.]

22. OBSERVATIONS ON THE NESTING HABITS OF SOME COMMON BIRDS

In my village in Kavasseri, (Palghat taluk, Malabar) there is a big Kali temple which was sheltered on all sides by a teak and irool plantation till the trees were cut down in 1950. The trees were all about 20 ft. in height, and in most places there was plenty of undergrowth such as lantana, etc. This wood was a sure draw for breeding birds in the months of April, May and June. From 1943 I used to spend many hours almost every summer afternoon in it. Curiously enough, one particular patch of this wood, bordering on a broad footpath, on the northern side of the temple, and adjacent to a road well sheltered by ancient mango trees, was a favourite with every kind of bird nesting here. I have found nests of the Indian Tree Pie, Blackheaded Oriole, Whitebrowed Fantail-flycatcher, Tailor Bird, and Large Cuckoo-shrike; and failed to find the nests of Little Minivet, Common Woodshrike, Whiteheaded Babbler and Iora which I was certain, bred here.

The fact that many of these birds chose to nest within a small area of a large wood resulted in my noticing some interesting facts about their relationship and general behaviour. I shall restrict myself

for the present to some of the most outstanding instances of this 'communal' nesting.

In March, 1943, I came across a nest of the Blackheaded Oriole (c/2), one of the Indian Tree Pie (c/4), and one of the Whitebrowed Fantail-flycatcher (c/3). Being more interested in birds' nests than in bird behaviour, I took all the clutches, only casually noticing that all three nests were within fifteen to twenty feet of one another. All the eggs were fresh, but I could not say which bird had laid first. I assumed then that the oriole and the flycatcher had chosen to build within the tree pie's territory for protection.

In 1944, 1945 and 1946 all these birds and many others were found haunting the same spot, but no nests were found. However, I began to realise that during the breeding season Indian Tree Pies and Black-headed Orioles were a little too often found in company, though occasionally the orioles were really chivying the tree pies.

It was in April 1947 that I got a good opportunity to study the behaviour of these birds at close quarters. On the 25th of April, I found a Large Cuckoo-shrike's nest (c/2) on a tree beside the footpath. While watching this, I kept an eye on other birds in the area, and saw that when one of the Large Cuckoo-shrikes went to chase a crow away, it was eagerly assisted by a Blackheaded Oriole and a pair of Whitebrowed Fantail-flycatchers. This led to the discovery of the flycatcher's nest on the 30th (c/3). On the 1st of May, a tree pie's nest was also discovered close by (4 chicks, a few days old). On the 4th I found the oriole's nest (c/2). It was hardly 30 feet away from the tree pie's; the tree pie's was about 50 feet away from the cuckoo-shrike's; and the fantail-flycatcher's was only 10 feet from the cuckoo-shrike's. The nests were all on different trees.

It was obvious that the first bird to lay eggs was the tree pie. Then the cuckoo-shrike; the flycatcher and the oriole must have followed suit, in that order. For the cuckoo-shrike's two eggs hatched out on the 3rd of May, the flycatcher's on the 6th, and the oriole's on the 12th. All the chicks of the tree pie left the nest and reached adulthood safely. One of the two chicks of the cuckoo-shrike disappeared before the 15th, and the other, I assume, left the nest safely between the 23rd and the 27th of May. The chicks of the fantail-flycatcher disappeared on the 12th, and those of the oriole on the 20th. In both cases they were undoubtedly snatched by some predatory creature, most probably the tree pie itself.

I spent an hour or two every day from the 25th April to the 23rd May near these nests and was able to study the behaviour of these birds to some extent. The tree pie's route to its regular feeding places led away from the oriole's nest, but was well within the 'territories' of the cuckoo-shrike and the fantail-flycatcher. The cuckoo-shrike never attacked the tree pie, though no crow, kite or eagle was ever allowed to pass by in peace. The fantail-flycatchers did not harry the cuckoo-shrikes, but could never tolerate the tree pies. Every time a tree pie flew that way (which was necessarily often), the flycatchers went madly in pursuit. The flycatchers were often assisted by a pair of Common Wood-shrikes, which in turn were frequently harassed by the flycatchers! When the cuckoo-shrike flew at a passing crow, the flycatchers and the orioles often joined it, but the oriole

never turned against the cuckoo-shrike, and rarely attacked the tree pie.

At first I could not understand how the nests of the smaller birds remained safe for such a long time within the tree pie's territory. But soon it was discovered that when there were eggs in the nest, the tree pies never foraged in the immediate neighbourhood of their nest-tree. Invariably they flew some 100-200 yards straight east before beginning the search for food, thus leaving a sort of 'sanctuary' round about their nest. When, however, the tree pie brought out its chicks, adults and young wandered about all round the nest-tree. In the course of this, as was inevitable, they must have come across the nests of the smaller birds and rifled them.

In 1948, April-May, another set of nests was found in the same place. On the 30th of April I saw a tree pie being chased by a pair of indignant Blackheaded Orioles and a pair of Large Cuckoo-shrikes. The cuckoo-shrikes attacked the tree pie only when it was on the wing, whereas the orioles dived at it even when the tree pie sat quietly on a branch. In 1947 the cuckoo-shrikes never took any notice of the tree pies.

On the 4th of May I discovered the tree pie's nest (c/4), and 20 feet away, the nest of the oriole. I could not examine the oriole's nest. On the 5th a tree pie and an oriole were chasing a Common Grey Hornbill away from this spot. After the hornbill had escaped, the oriole turned against its erstwhile ally, the tree pie, and followed it until the tree pie returned to its own nest. Observations on these nests could not be continued as I had to leave the place for a short period. On my return on the 26th I found that the tree pie as well as the oriole had left the area.

On 19th May, 1949, I discovered at the same spot the nest of a Blackheaded Oriole containing a single chick, and saw a pair of Large Cuckoo-shrikes of which one bird had nesting material in its bill. On the 21st May a tree pie's nest was found 25 to 30 feet away from the oriole's. There were eggs in the nest. On the 28th the orioles were seen feeding their chick. The tree pie was sitting on eggs. From the 29th of May to the 10th of June I had to be away. On 10th June both nests were found deserted.

So, four times, definite evidence was found that these birds often nest close together. But it appeared to me as though (1) this was due to a common attachment to a particular nesting spot, rather than to the weaker birds' desire for protection; (2) they rarely became reconciled to each other's presence in the area; (3) the tree pie let others live in peace till its chicks hatched; and (4) this was due to the tree pie's habit of leaving at least a hundred yards around its nest unexplored while brooding eggs.

I hope some bird watcher will take up this thread and pursue it. It is quite on the cards that similar favoured spots may exist wherever birds are common.

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May 25, 1953.

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